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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,884	01/17/2001	Panayotis C. Andricacos	YOR20000578US1 4972	
7590	03/19/2004		EXAM	INER
Connolly Bove Lodge & Hutz LLP			MUTSCHLER, BRIAN L	
Suite 800 1990 M Street, N.W.			ART UNIT	PAPER NUMBER
Washington, DC 20036-3425			1753	

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Advisory Action	09/760,884	ANDRICACOS ET AL.			
navicery rieden	Examiner	Art Unit			
	Brian L. Mutschler	1753			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
THE REPLY FILED 09 February 2004 FAILS TO PLACI Therefore, further action by the applicant is required to a final rejection under 37 CFR 1.113 may only be either: (1 condition for allowance; (2) a timely filed Notice of Appetexamination (RCE) in compliance with 37 CFR 1.114.	void abandonment of this applic 1) a timely filed amendment whi	cation. A proper reply to a ch places the application in			
PERIOD FOR RE	PLY [check either a) or b)]				
a) The period for reply expires 3 months from the mailing date of					
b) The period for reply expires on: (1) the mailing date of this Adv event, however, will the statutory period for reply expire later the ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f).	an SIX MONTHS from the mailing date of FILED WITHIN TWO MONTHS OF THE	fthe final rejection. E FINAL REJECTION. See MPEP			
Extensions of time may be obtained under 37 CFR 1.136(a). The data nave been filed is the date for purposes of determining the period of extensions CFR 1.17(a) is calculated from: (1) the expiration date of the shortened (b) above, if checked. Any reply received by the Office later than three most patent term adjustment. See 37 CFR 1.704(b).	sion and the corresponding amount of the statutory period for reply originally set in	fee. The appropriate extension fee under the final Office action; or (2) as set forth in			
1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CF					
2. The proposed amendment(s) will not be entered be	ecause:				
(a) they raise new issues that would require further consideration and/or search (see NOTE below);					
(b) they raise the issue of new matter (see Note below);					
(c) they are not deemed to place the application i issues for appeal; and/or	n better form for appeal by mat	erially reducing or simplifying the			
(d) They present additional claims without canceling a corresponding number of finally rejected claims.					
NOTE:					
3. Applicant's reply has overcome the following rejection	tion(s):				
 Newly proposed or amended claim(s) would canceling the non-allowable claim(s). 	be allowable if submitted in a s	eparate, timely filed amendment			
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request fo application in condition for allowance because: See		sidered but does NOT place the			
6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection.	cause it is not directed SOLELY	to issues which were newly			
7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we					
The status of the claim(s) is (or will be) as follows:					
Claim(s) allowed:					
Claim(s) objected to:					
Claim(s) rejected: 10-22,29 and 30.	,				
Claim(s) withdrawn from consideration:					
The drawing correction filed on is a) □ approved or b) □ disapproved by the Examiner.					
□ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s)					
10. ☐ Other:					

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's arguments have been considered but are not persuasive. Applicant argues that "Chen does not teach a successful method [of electroplating copper directly onto a barrier layer]" (see page 5 og Applicant's response). First, Chen expressly teaches, "In accordance with the invention, an alkaline electrolytic copper bath is used ... to electroplate copper directly onto a barrier layer material" (see page 7, lines 3-7). Second, even when other methods are used to deposit a first seed layer, the seed layer repair process electroplates directly on areas not covered by the initial deposition (see Figures 2B and 2C). Applicant further argues that Landau and Chen are "mutually inoperable" because "Landau discloses a plating solution containing up to 0.2 M sulfuric acid, whereas Chen discloses a plating solution having a pH of 5-13 and preferably at least 9.5" (see page 6 of Applicant's response). This argument is not persuasive because it inaccurately reflects the teachings of Landau. Landau teaches that "a high acid concentration is detrimental to deposition uniformity" and that "a lower acidic concentration minimizes harmful corrosion and material stability problems" (see col. 17, line 57 to col. 18, line 16). Landau further teaches that "the invention contemplates an electroplating solution having no acid or very low acid concentrations" (see col. 18, lines 12-16). Therefore, the teachings of Landau are in agreement with the teachings of Chen, which teaches the use of alkaline solutions.

Regarding the rejection of claims 15 and 21-23 over Ting, Applicant relies on the arguments addressed above.

Regarding the rejection of claims 15 and 21-23 over Gilton and Woo, the rejection was inadvertanly maintained in the rejection mailed October 9, 2003, and has no bearing on the current status of the claims.

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